



State of Alaska

Department of Natural Resources

Division of Geological & Geophysical Surveys

Progress Report: Systematic Approach to Assessing the Vulnerability of Alaska's Coastal Infrastructure to Erosion

Date: July 16, 2019

Period of Reporting: April 1-June 30, 2019

Submitted to: Denali Commission

### Objectives and Milestones

Objectives	Year 1			
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Project kickoff, account setup at State of Alaska, and staff hiring		X		
Establish data agreements for infrastructure file datasets			X	
Provide initial assessment at pilot sites (Locations: TBA)				X

(2000) character limit

The first objective of this project is to conduct a project kickoff meeting, set up accounts in State of Alaska systems, and hire staff, which have been met. A project kickoff meeting was held April 11, 2019. State of Alaska accounts were established April 28, 2019, allowing for progress to be made in hiring project staff and purchasing necessary office equipment.

From mid-April to May, project manager, Jacquelyn Overbeck worked through the State position request and recruitment process to hire a project staff geologist, Mark Turner, to be primary project staff for this award. The hire was made June 5, 2019. Since hire, Mark has already made progress in evaluating the shoreline change assessments that will be used to model erosion for this project. Mark has improved the accuracy of the baseline datasets, including orthorectified historical aerial imagery, by which shorelines are delineated upon. Mark is also working to update data files for consistency amongst all communities expected to be analyzed.

Project manager, Overbeck, has worked to fill in gaps in orthoimagery data for regions where shoreline change analyses were conducted by an agency other than DGGs. The USGS has agreed to share any orthoimagery they have collected for the northwest and North Slope coasts of Alaska with DGGs. NOAA's Office for Coastal Management had begun a contract (before this award) to collect orthoimagery over Bristol Bay and to update the North Slope, which will be delivered to DGGs directly upon completion (expected in 2019). A portion of the data in Bristol Bay have already been delivered to

DGGS. Overbeck is also working with the University of Alaska Fairbanks, Chris Maio and students, to conduct the shoreline change analysis for the Bristol Bay region utilizing the new data. This work is a part of a Bureau of Indian Affairs (BIA) project that aligns with this award. A graduate student was hired, Roberta Glenn, to work on the BIA project in the DGGS office alongside DGGS staff.

**Budget Summary**

No changes. On track.

**Expenditures:**

Total \$6,559.79

Den. Com. \$6,176.8

Match \$382.99